

REMARKS

Claims 1-37 are pending. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks herein.

Claim Rejections – 35 USC §103

Claims 1, 3-5, 9-12, 15, 16, 18-20, 24-27, and 30 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 5,630,069 to Flores et al. ("Flores") in view of Van Der Aalst, Wil M.P., "Process-Oriented Architectures for Electronic Commerce and Interorganizational Workflow," *Information Systems* Vol. 24, No. 8, pp. 639-671, 1999 ("Aalst"). This rejection is respectfully traversed.

Each of claims 1 and 16, as amended herein, include the features of a first workflow associated with only a first party, a first workflow view representing an abstracted first workflow, the first workflow view expressing virtual tasks of the first workflow as first vertices within a first matrix, a second workflow associated with only a second party, a second workflow view representing an abstracted second workflow, the second workflow view expressing virtual tasks of the second workflow as second vertices within a second matrix. Each of claims 1 and 16 further include the features of a coalition workflow view referencing the first workflow view and the second workflow view to provide a collaborative workflow, the collaborative workflow specifying tasks that the first party and the second party are required to perform. As discussed in further detail below, Flores fails to disclose at least the above-described features of each of claims 1 and 16, and Aalst fails to cure the deficient disclosure of Flores.

Flores describes a method and apparatus for creating workflow maps of business processes. More specifically, Flores describes a unified tool, with which business process analysis, design, and documentation can be performed (see col. 1, lines 7-10). As explicitly described in Flores:

The invention produces standard workflow maps of business processes that show workflows and the links defined between workflows.

The user of the invented system is known as a business process

analyst. To use the system, the business process analyst first creates a business process which may be defined in terms of a business process map. A business process map contains customer and performer names and organizational roles for the primary workflow, target cycle times for the entire process, version of the process, when and by whom the process may be started, and so forth. In addition, it contains workflow and link definitions for each workflow and link in the process.

Workflows are represented graphically as elliptical loops with four phases as shown in FIGS. 1a-1f. Each workflow, and each phase within the workflow, has a starting point and an ending point. The primary workflow of the business process is displayed as a large elliptical loop to make it visually distinct as shown in FIG. 2.

(see col. 7, lines 31-46)

Accordingly, Fig. 2 illustrates a business process map that is comprised of a plurality of linked workflows. As illustrated in Figs. 1a-1f, each workflow is associated with at least two parties, and three parties in some instances. More specifically, Fig. 1a illustrates a generic workflow that is associated with both a customer and a performer. Figs. 1b and 1c respectively illustrate request and offer workflows that are associated with both the customer and the performer. Fig. 1d illustrates another workflow that is associated with the customer, the performer and an observer. Consequently, all of the workflows of Flores are associated with multiple parties (see col. 3, lines 24-42, and col. 7, line 60-col. 8, line 5).

The user generates a business process map using the unified tool of Flores by adding workflows and linking workflows. More specifically, Flores provides that:

A link specifies the relationship between two workflows, i.e. an action in one workflow causes an action in another workflow. When such a relationship is established, it is said that the second workflow is linked to the first.

(see col. 8, lines 40-43)

As also described in col. 3, line 56-col. 4, line 7, the links define whether particular workflows are executed in parallel (i.e., concurrently) or serial (i.e., consecutively).

Flores fails to disclose the features of a first workflow associated with only a first party, and a second workflow associated with only a second party. More specifically, and as described

in detail above, the workflows disclosed in Flores are associated with at least two parties (i.e., the customer and the performer), and in some instances three parties (i.e., the customer, the performer, and the observer). The Examiner has asserted that Fig. 2; col. 7, line 60-col. 8, line 5 disclose different roles for each workflow (see the final Office action at page 3). An accurate reading of Flores, however, provides that each workflow includes three different roles (i.e., the customer, the performer and the observer). There is no disclosure in Flores of a workflow being associated with only one role, and such a reading of Flores would be inconsistent with the express teachings of Flores. More specifically, each workflow includes four distinct phases (i.e., the proposal, agreement, performance and satisfaction phases). At least two parties (i.e., the customer and the performer) are required to execute the phase associated therewith (e.g., the customer executes the proposal and satisfaction phases while the performer executes the agreement and performance phases).

Flores also fails to disclose the features of a first workflow view representing an abstracted first workflow, the first workflow view expressing virtual tasks of the first workflow, and a second workflow view representing an abstracted second workflow, the second workflow view expressing virtual tasks of the second workflow. Instead, Flores describes only a single view that includes a business process map (Fig. 2), where the business process map graphically illustrates the linked workflows, as described in detail above. Further, none of the workflows illustrated in the business map of Fig. 2 are abstracted workflows. Instead, each includes the standard, base workflow as illustrated in Figs. 1a-1f of Flores.

In asserting that Flores discloses first and second workflow views, the Examiner cites Fig. 2 as illustrating a first workflow view, and again cites Fig. 2 as illustrating a second workflow view (see the final Office action at page 3). It is unclear as to how the business process map of Fig. 2 can be considered as a first workflow view, and, at the same time, be considered a second workflow view. Further, Fig. 2 is again cited by the Examiner as illustrating a coalition workflow (see the final Office action at page 3). It is even less clear as to how the business process map of Fig. 2 can be considered to disclose a first workflow view, a second workflow view and a coalition workflow view, all at the same time.

With regard to the features of the first workflow view expressing virtual tasks of the first workflow as first vertices within a first matrix, and the second workflow view expressing virtual

tasks of the second workflow as second vertices within a second matrix, the Examiner notes that Flores fails to disclose such features, and turns to Aalst. Applicants submit that Aalst fails to cure the deficient disclosure of Flores.

Aalst is directed to partitioning an interorganizational workflow over multiple business partners (see Abstract). Aalst describes instances of "case transfer", in which "a case (i.e., a workflow instance) resides at exactly one location: one business partner has the case in its possession." (see Section 5.1: Definition of CT-IOWF, page 649). At the top of page 650, Aalst defines an Interorganizational Workflow with Case Transfers (CT-IOWF) as a tuple CT-IOWF, which is equal to $(B, WF, T, \text{task_map})$, where B is the set of business partners, WF is a WF-net describing the interorganizational workflow, T is the set of tasks in the WF-net, and task_map is a function mapping business partners to sets of tasks.

In asserting that Aalst discloses the features of the first workflow view expressing virtual tasks of the first workflow as first vertices within a first matrix, and the second workflow view expressing virtual tasks of the second workflow as second vertices within a second matrix, the Examiner has equated the CT-IOWF tuple of Aalst with a matrix (see the final Office action at pages 3-4). More specifically, the Examiner has asserted that "workflow tasks T for different business partners B are expressed as tuples [matrices]" (see the final Office action at the bottom of page 3). Initially, Applicants respectfully note that the Examiner's assertion is inaccurate. Aalst describes an "Interorganizational Workflow with Case Transfers (CT-IOWF)" as a tuple, with tasks T and the set of business partners B as parameters of the CT-IOWF tuple. Aalst does not express the tasks T and the set of business partners B as tuples, as the Examiner has asserted. Further, the Examiner has equated tuples with matrices, which Applicants believe is not correct. As one skilled in the art readily appreciates, a tuple is a sequence of values that describes mathematical objects having specific components, whereas a matrix is a rectangular table of elements, and is used to describe linear equations, keep track of the coefficients of linear transformations and/or to record data that depend on multiple parameters, for example.

Applicants submit that the combination of Flores and Aalst fail to support a prima facie case of obviousness. In view of the foregoing, Flores and Aalst, taken alone or in combination, fail to render the features of claims 1 and 16 obvious. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claims 2 and 17 stand rejected under 35 U.S.C. §103(a) as being obvious over Flores in view of Aalst, and further in view of U.S. Pat. No. 7,184,966 to Parsonnet et al. ("Parsonnet"). This rejection is respectfully traversed.

Claims 2 and 17 ultimately depend from claims 1 and 16, respectively, which define over the asserted references, as discussed in detail above. Consequently, each of claims 2 and 17 also defines over the asserted references for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claims 6-8, 13, 14, 21-23, 28, 29 and 31-37 stand rejected under 35 U.S.C. §103(a) as being obvious over Flores in view of Aalst, and further in view of U.S. Pat. No. 5,826,020 to Randell ("Randell"). This rejection is respectfully traversed.

Each of claims 6-8, 13, 14, 21-23, 28 and 29 ultimately depends from one of claims 1 and 16, which define over the asserted references, as discussed in detail above. Consequently, each of claims 6-8, 13, 14, 21-23, 28 and 29 also defines over the asserted references for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claim 31, as amended herein, includes the features of a first workflow modeler operable to model a first workflow associated with only a first party, a first view modeler operable to model a first virtual workflow as an abstracted first workflow, the first view modeler expressing virtual tasks of the first workflow as first vertices within a first matrix of a first workflow view, and a workflow engine operable to execute the first workflow and to virtually execute the first virtual workflow in conjunction with a second workflow associated with only a second party. As discussed in further detail below, Flores fails to disclose at least the above-described features of claim 31, and Aalst fails to cure the deficient disclosure of Flores.

To the extent that claim 31 includes features similar to each of claims 1 and 16, Flores fails to disclose such similar features, and Aalst fails to cure the deficient disclosure of Flores. More specifically, Flores fails to disclose either a first workflow associated with only a first party, or a second workflow associated with only a second party. As discussed in detail above, the workflows of Flores are necessarily associated with at least two parties. Further, Flores fails to disclose the feature of modeling a first virtual workflow as an abstracted first workflow. Instead, Flores describes only a single view that includes a business process map (Fig. 2), where

the business process map graphically illustrates the linked workflows. None of the workflows illustrated in the business map of Fig. 2 are abstracted workflows. Instead, each includes the standard, base workflow as illustrated in Figs. 1a-1f of Flores. As admitted by the Examiner, Flores also fails to disclose expressing virtual tasks of the first workflow as first vertices within a first matrix of a first workflow view, and turns to Aalst for such disclosure. As discussed in detail above, Aalst fails to cure the deficient disclosure of Flores, and the Examiner's assertions with regard to Aalst are inaccurate.

In view of the foregoing, Flores, Aalst and Randell, taken alone or in combination, fail to render the features of claim 31 obvious. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Each of claims 32-37 ultimately depends from claim 31, which defines over the asserted references, as discussed in detail above. Consequently, each of claims 32-37 also defines over the asserted references for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.


CONCLUSION

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reason for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to amendment. Applicants respectfully request consideration of all filed IDS' not previously considered, by initialing and returning each Form 1449.

No charges are believed due. However, if any fees are due, they are being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply all charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 13909-026001.

Respectfully submitted,

Date: August 5, 2008


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